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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,764	02/27/2004	Jason M. Sharpe	13835.112USU1	8455
23552 7590 04/11/2008 MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903				
EXAMINER MEHMOOD, JENNIFER				
ART UNIT		PAPER NUMBER		
2612				
MAIL DATE		DELIVERY MODE		
04/11/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/788,764

Applicant(s)

SHARPE ET AL.

Examiner

JENNIFER MEHMOOD

Art Unit

2612

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 29-37 is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-13, 16-22 and 25-28 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 14, 15, 23 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date 6/21/06; 3/9/06; 6/7/04
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Claim Objections

1. Claim 20 is objected to because of the following informalities: missing language in the phrase "as to moveable relative to". Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claim 2 recites the limitation "the detection system" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 10, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Harrison (US 5,617,079).

For claim 1, Harrison discloses a life safety alarm, comprising: an alarm housing that houses a system to detect a life threatening condition and alarm electronics (col 2,

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Ins 59-67); and a battery carrier configured to carry at least one battery (col 3, Ins 8-19 and 33-40; Fig. 1, items 16 and 18; Figs. 2 and 3, item 18), the battery carrier is pivotally connected to the alarm housing for pivoting movement relative to the alarm housing between a closed position and an open position (Fig. 6, item 64; col 4, Ins 56-67).

For claims 2, 11, Harrison discloses the detection system comprises a smoke detector system (col 2, Ins 62-65).

For claim 10, Harrison discloses a life safety alarm, comprising: an alarm housing that houses a system to detect a life threatening condition and alarm electronics (col 3, Ins 8-40); and a battery carrier that is mounted adjacent on the alarm housing so that it is accessible from the bottom of the alarm housing (Fig. 1, item 20; col 4, Ins 56-67), the battery being mounted for movement between a closed position and an open position (col 1, Ins 64-67; col 4, Ins 10-20).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3, 6, 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison (US 5,617,079) and further in view of Hetherington (US 6,077,107).

For claims 3 and 12, Harrison discloses a mechanism connecting the battery carrier to the alarm housing, and configured to control pivoting movement of the battery carrier between the closed and open positions (col 1, Ins 61-67). Harrison does not disclose a double acting latch mechanism which connects the battery to the alarm housing. Hetherington, on the other hand, discloses a double acting latch mechanism which connects the battery to the alarm housing (col 3, Ins 13-20 and 27-35; Fig. 2A, items 22a and 22b). It would have been obvious to one of ordinary skill in the art, at the time the invention was made to use a double acting latch mechanism, disclosed by Hetherington, in order to secure the battery housing door of Harrison to the alarm housing so that the battery remains secure within the alarm housing.

For claims 6, 16, Harrison discloses a battery carrier, but does not disclose a spring engaged battery carrier that biases the battery barrier toward an open position. Hetherington, however, discloses the feature of a spring engaged battery carrier that biases the battery barrier toward an open position (col 3, Ins 32-43 – prevents door from being closed). It would have been obvious to one of ordinary skill in the art, at the time the invention was made to include a spring which prevents the door from being closed/biased in an open position, as disclosed by Hetherington, to the battery carrier, disclosed by Harrison, so that a user is notified as to missing batteries (Hetherington - col 3, Ins 38-43).

For claims 7, 8, 17, 18, Harrison discloses an alarm housing, but does not disclose that the housing is configured to prevent closure of the battery carrier from the open position if a battery is incorrectly installed in the battery carrier. Hetherington

discloses an alarm housing that is configured to prevent closure of the battery carrier from the open position if batteries are incorrectly installed (i.e. incorrect quantity or missing) - (col 1, lns 60-67; col 2, lns 5-10; col 3, lns 13-20). It would have been obvious to one of ordinary skill in the art, at the time the invention was made to prevent the battery carrier, as disclosed by Harrison, from being closed upon an incorrect installation of a battery, as disclosed by Hetherington, to ensure alarm functionality based on a user installing the correct amount of batteries.

For claim 13, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 1 as stated above.

9. Claims 9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison (US 5,617,079) and further in view of Serby (US 5,444,434).

Harrison discloses a battery carrier in open and closed positions, but does not disclose a tamper resist mechanism that is configured to prevent the battery carrier from being opened when the battery carrier is at the closed position. Serby, however, discloses a tamper resist mechanism that is configured to prevent the battery carrier from being opened when the battery carrier is at the closed position (Fig. 4; col 5, lns 21-29). It would have been obvious to one of ordinary skill in the art, at the time the invention was made to prevent the battery carrier, as disclosed by Harrison, to be unable to be opened, as disclosed by Serby, to guarantee that the alarm system is fully powered at all times to ensure operability.

10. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison (US 5,617,079) and further in view of Holloway et al. (US 6,739,633).

For claim 20, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 1 as stated above. However, Harrison does not disclose a push-to-open and push-to-close mechanism. Holloway, on the other hand, discloses a push-to-open and push-to-close mechanism for locking a door on a compartment. It would have been obvious to one of ordinary skill in the art, at the time the invention was made to include a push-to-open and push-to-close mechanism, as disclosed by Holloway, on the battery carrier of Harrison, in order to ensure that the battery housing is firmly locked within the alarm housing.

For claim 21, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 2 as stated above.

11. Claims 22 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison (US 5,617,079) and Holloway et al. (US 6,739,633) and further in view of Hetherington (US 6,077,107).

For claim 22, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 3 as stated above.

For claim 25, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 6 as stated above.

For claim 26, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 7 as stated above.

For claim 27, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 8 as stated above.

12. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison (US 5,617,079) and Holloway et al. (US 6,739,633) and further in view of Serby (US 5,444,434).

The claim is interpreted and rejected for the same reasons as stated in the rejection of claim 9 as stated above.

Allowable Subject Matter

13. Claims 29-37 allowed.

14. Claims 4, 5, 14, 15, 23, and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. The following is a statement of reasons for the indication of allowable subject matter: The present invention discloses substantial structure of a latch mechanism connecting the battery carrier to a housing, where the latch mechanism includes at least one heart-shaped cam groove and at least one cam follower engaged in the cam groove to control the movements of the battery carrier between the open and closed positions, and to retain the battery carrier at the closed position.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Krechmer et al. (US 4,625,259), Nickles et al. (US 5,646,598), and Wu (US 5,995,363) disclose a battery carrier which pivots between an open and a closed position of a battery housing.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A Mehmood whose telephone number is (571) 272.2976. The examiner can normally be reached on M-F from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. George Bugg, can be reached at (571) 272.2998. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jennifer A. Mehmood/
Primary Examiner
April 8, 2008